

Executive Committee:

Philip Bradley, Commissioner
South Carolina Public Service Commission

Robert Capstick, Director of Government Affairs
Yankee Atomic/Connecticut Yankee

J. Terry Deason, Chairman
Florida Public Service Commission

Renze Hoeksema, Director of Federal Affairs
Detroit Edison

LeRoy Koppendray, Commissioner
Minnesota Public Utilities Commission

NWSC

Nuclear Waste Strategy Coalition

October 10, 2001

RECEIVED

OCT 16 2001

Ms. Carol Hanlon
U.S. Department of Energy
Yucca Mountain Site Characterization Office
(M/S #025)
P. O. Box 30307
North Las Vegas, NV 89036-0307

Re: Comments of the Nuclear Waste Strategy Coalition in the Yucca Mountain
Preliminary Site Suitability Evaluation Report.
DOE/RW-0540 (July 2001).

Dear Ms. Hanlon:

The Nuclear Waste Strategy Coalition hereby submits the attached comments on the above-referenced U.S. Department of Energy report.

Sincerely,



LeRoy Koppendray
Commissioner,
Minnesota Public Utilities Commission, and on behalf of
The Nuclear Waste Strategy Coalition Executive Committee

COMMENTS OF THE NUCLEAR WASTE STRATEGY COALITION

To The
Yucca Mountain Preliminary Site Suitability Evaluation Report

DOE/RW-0540

INTRODUCTION:

The Nuclear Waste Strategy Coalition (NWSC) is pleased that the Department of Energy's (DOE) Yucca Mountain Preliminary Site Suitability Evaluation (PSSE) concludes that:

- 1) The *Preliminary Preclosure Safety Assessment for Monitored Geologic Repository Site Recommendation, Yucca Mountain Science and Engineering Report*, and the results of the preliminary preclosure suitability evaluations indicate that the dose to the public and repository workers during the preclosure period would fall below the limits specified in the EPA radiation protection standards and proposed NRC requirements.
- 2) The *Yucca Mountain Science and Engineering Report, Total System Performance Assessment for the Site Recommendation*, and *FY01 Supplemental Science and Performance Analyses* and the results of the preliminary postclosure suitability evaluations indicate that the preliminary postclosure dose estimates, considering the combined nominal and disruptive scenario, are below the final EPA and proposed NRC standards for individual protection.
- 3) The DOE is continuing the process of determining whether to recommend the Yucca Mountain site for the location of a permanent repository.

DISCUSSION:**History:**

Yucca Mountain is probably the most scientifically studied piece of real estate in history. The DOE's efforts to evaluate other sites over the years and the process leading to a decision supporting Yucca Mountain as the desired site has been painstaking. Nine sites in six states were studied as potential repository sites: Vacherie Dome, LA; Cypress Creek Dome, MS; Richton Dome, MS; Yucca Mountain, NV; Deaf Smith County, TX; Swisher County, TX; Davis Canyon, UT; Lavender Canyon, UT; and the Hanford Site, WA. In 1986, DOE chose five sites for further study. Yucca Mountain was named as the first choice. In 1987, Congress amended the Nuclear Waste Policy Act of 1982 (NWPA) and directed the DOE to focus on Yucca Mountain.

In the Energy Policy Act of 1992, Congress reinforced its intent that Yucca Mountain remains the exclusive focus of the nation's repository program. This Act also directed the U.S. Environmental Protection Agency (EPA) to issue new public health and safety standards for the protection of the public from releases of radioactive materials stored or disposed of in a repository at the Yucca Mountain site. The Nuclear Regulatory Commission (NRC) was directed to modify its technical requirements to be consistent with the EPA's new standards and the National Academy of Sciences findings and recommendations.

The PSSE is supported by a comprehensive set of scientific and technical integrating documents:

- *Yucca Mountain Science and Engineering Report (DOE 2001)*
- *Preliminary Preclosure Safety Assessment for Monitored Geologic Repository Site Recommendation (BSC 2001a)*
- *Total System Performance Assessment for the Site Recommendation (CRWMS*

NWSC PSSE Comments - Page Three

M&O 2000c)

- *FY01 Supplemental Science and Performance Analyses (BSC 2001b; BSC 2001c)*

Overall Costs and Potential Impact:

Since enactment of the Nuclear Waste Policy Act of 1982, the nation's ratepayers have paid more than \$18 billion into the Nuclear Waste Fund, including interest, for the DOE to license, construct, operate and monitor a repository for high-level nuclear waste from commercial power plants across the nation. Since 1987, the DOE has spent approximately \$7 billion of these ratepayer contributions to characterize a geologic repository at Yucca Mountain.

In a letter sent by the DOE to state officials suggested topics for comment were such as, "Why the Secretary of Energy should not proceed with a recommendation to develop the permanent repository at Yucca Mountain, what measures should the Nation consider for assuring safe disposal of spent nuclear fuel and high-level radioactive waste?" We believe that nearly 20 years of in-depth scientific research have covered every facet of Yucca Mountain, from hydrology to geology to seismology without any "show stoppers." Surely, the time has come to move forward and act without further ado.

Stranding spent nuclear fuel in dry storage casks at plant sites with effective institutional control for at least 10,000 years would cost approximately **\$5 trillion (1998 dollars)**. Today, ratepayers in 33 states continue to support 73 storage sites across the nation. In addition, stranding nuclear waste at plant sites could result in premature shutdown of nuclear power plants and loss of energy nationwide. It would be inexcusable if the DOE elected to strand high-level nuclear waste at plant sites at such high cost to the nation's ratepayers and potentially to the environment. Utility

NWSC PSSE Comments – Page Four

plant sites have not been extensively studied for their suitability to become permanent nuclear waste repositories. It is certainly preferable to transport spent nuclear fuel to a remote, arid site that is being designed by experts for the purpose of permanent disposal that will be protected by the federal government. In the event of a terrorist attack, one site is certainly easier to protect than 73 geographically dispersed sites.

The geologic structure of Yucca Mountain, as the DOE studies have shown, provides more than adequate protection for spent nuclear fuel storage and high-level radioactive waste.

Transportation Impacts:

The DOE has allowed misinformation to circulate about its ability to safely transport spent nuclear fuel and high-level radioactive water across the nation without defending its position. For more than 30 years, the DOE has made 3,000 high-level nuclear waste shipments in this country without a single radiation injury. And, according to the U.S. House Energy and Water Development Appropriations Bill, 2000 Report, the DOE has an “exemplary safety record in the shipping of commercial and naval nuclear fuel” (p.3). Any determination that would delay or prevent the opening and operation of the Yucca Mountain repository due to concerns over transportation risks, would effectively eliminate any transportation of spent nuclear fuel and high-level nuclear waste to any site anywhere in the U.S. There is nothing unique about transporting these materials to Yucca Mountain, Nevada. Therefore, the NWSC urges the DOE to be proud of its safe transportation record and initiate the development of legal, physical processes, management and integration systems rather than wait until the final selection of the permanent repository.

CONCLUSION

We laud the Secretary of Energy for having the political will to move this program forward after years of delay and inaction. The Secretary should recommend the Yucca Mountain site to the President for the location of a repository and begin to construct, operate, monitor, and eventually close a geologic repository for the disposal of spent nuclear fuel and high-level radioactive waste. The NWSC notes that the DOE did not identify any potential impacts that would be a basis for not proceeding with the permanent repository. Therefore, we urge the DOE to fulfill its contractual and statutory obligations and begin removing spent nuclear fuel and high-level radioactive waste from utility plant sites without further delay.

On behalf of its members, the NWSC emphasizes that the longer the delay in the DOE's acceptance of nuclear waste from plant sites, the greater the burden the utilities and their ratepayers are forced to bear. Spent nuclear fuel can be safely transported and stored at a monitored, retrievable facility near the Yucca Mountain site, the most scientifically studied piece of land in history. We urge the DOE to remove high-level radioactive waste from reactor sites without further delay to prevent unnecessary and duplicative costs to utility customers across the nation. A consolidated repository also will position spent fuel to take advantage of emerging reprocessing technologies that could offer new energy generating capacity, reduce the volume of nuclear waste for storage and ensure energy independence in a diversified energy portfolio.

The NWSC is comprised of state regulators, state attorneys general, nuclear electric utilities and associate members working together to hold the federal government accountable for its contractual and statutory obligations to remove spent nuclear fuel from power plants across the

NWSC PSSE Comments – Page Six

nation to interim storage and eventually to a permanent repository. The NWSC is made of participants from 43 organizations in 25 states.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'LeRoy Koppendraye', written in a cursive style.

LeRoy Koppendraye,
Commissioner,
Minnesota Public Utilities Commission, and on
behalf of the Nuclear Waste Strategy Coalition.

October 10, 2001